

Claims

1. Billing method to determine usage fees which arise through the use of a digital telecommunications network, characterized in that the usage fee billed to the customer for a connection is determined from statistical characteristics of previous connections of this customer.

2. Billing method according to claim 1, characterized in that the usage fee charged to a new customer of the telecommunications network for a connection is determined from statistical characteristics of previous connections of at least one group of users, for example of all users of the digital telecommunications network.

3. Billing method to determine usage fees which arise through the use of a digital telecommunications network, characterized in that the usage fees billed to a customer are determined from a dynamic client profile stored in a first memory area, which profile is derived from one or multiple random variables of previous connections of this customer, the stored client profile being dynamically derived again after new connections of the customer.

4. Billing method according to claim 3, characterized in that the usage fees are determined from a dynamic overall client profile stored in a second memory area, which profile is derived from one or multiple random variables of previous connections of at least one group of users of the digital telecommunications network.

5. Billing method according to claim 3, characterized in that the client profile contains a value proportional to the average price per connection of the customer.

6. Billing method according to claim 3, characterized in that the client profile contains a value proportional to the average duration of a connection of the customer.

7. Billing method according to claim 3, characterized in that the client profile contains the number of connections of the customer in pre-defined classes of duration.

8. Billing method according to claim 3, characterized in that the client profile also contains multi-dimensional functions of random variables of previous connections of the customer of the digital telecommunications network.

9. Billing method according to claim 3, characterized in that the random variables used to derive the client profile include the connection duration, the time of day, the day of the week, and/or geographic characteristics of previous connections.

10. Billing method according to claim 3, characterized in that the usage fees for new connections are dependent on the statistical system load obtained from the overall client profile.

11. Billing method according to claim 3, characterized in that the usage fees for new connections are determined from the stored dynamic client profile when the connection is established and that said usage fees are charged directly.

12. Billing method according to claim 3, characterized in that the fees which will be determined for anticipated new connections are determined prior to establishing the connection and communicated to the customer, the customer having the possibility to interrupt the connection establishment if the price is too high for him.

13. Telecommunications terminal device (1) comprising:

a third memory area (103), storing a pre-paid amount of money,

a processor (100) which can debit or subsequently load the amount of money,

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and that the processor can determine the amount for new
5 connections from the stored dynamic client profile and can debit it directly out
of a third memory area (103) when a connection is established.

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18. Chipcard (10) which can be used in a telecommunications device, comprising:

a first memory area (101) which stores a dynamic client profile which is derived from one or multiple random variables of previous connections of owner of the chipcard,

a processor (100) to determine the dynamic client profile again after
5 a new connection, and to determine the usage fee for new connections from the stored dynamic client profile.

19. Chipcard according to the preceding claim, characterized by the following additional features:

a third memory area (103) storing a pre-paid amount of money,
10 means (100) to debit or subsequently load the amount of money,

means (100) to debit directly from the third memory area the fee for new connections determined from the stored dynamic client profile.

20. Chipcard according to claim 18, characterized in that the fee for new connections is determined from a statistical dynamic overall client profile
15 stored in a second memory area (102), which overall client profile is derived from one or multiple random variables of previous connections of at least one group of customers of the digital telecommunications network, said overall client profile being adapted dynamically.

21. Chipcard according to claim 18, characterized in that the random
20 variables used to derive the client profile include the connection duration, the time of day, the day of the week, and/or geographic characteristics of previous connections.

22. Chipcard according to claim 18, characterized in that the fees for new connections are dependent on the statistical system load obtained from
25 the overall client profile.

23. Billing system, intended for the determination of telecommunica-

tions network usage fees, comprising:

5 a first memory area which stores a dynamic client profile for at least one customer of the telecommunications network, said client profile being derived from one or multiple random variables of previous connections of the customer,

means to determine one or multiple random variables with every new connection,

means to calculate again the dynamic client profile depending on the determined random variable(s),

10 means to determine the usage fee from the stored dynamic client profile and to charge said fee to the client.

24. Billing system according to claim 23, characterized in that the usage fee is determined from a statistical dynamic overall client profile stored in a second memory area, which overall client profile is derived from one or
15 multiple random variables of previous connections of at least one group of customers, the stored overall client profile being adapted dynamically.

25. Billing system according to claim 23, characterized in that the random variables used to derive the client profile include the connection duration, the time of day, the day of the week, and/or geographic
20 characteristics of previous connections.

26. Billing system according to claim 23, characterized in that the usage fee is dependent on the statistical system load obtained from the overall client profile.

27. Data carrier programmed by a computer program which can be
25 used to control a programmable device, comprising:

5 means to determine one or multiple statistical characteristics with every new connection,

means to determine a usage fee from the stored dynamic client
10 profile.

28. Data carrier according to the preceding claim, characterized in that the usage fee is determined from a statistical dynamic overall client profile stored in a second memory area, which overall client profile is derived from one or multiple random variables of previous connections of at least one group of customers, the stored overall client profile being adapted dynamically.

20 30. Data carrier according to claim 27, characterized in that the fees for new connections are dependent on the statistical system load obtained from the overall client profile.

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